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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/061,441	04/16/1998	LEO JOHN WILZ	38292R1	1675

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EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2686

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/061,441

Applicant(s)

WILZ, LEO JOHN

Examiner

Nghi H. Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-24 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-24, 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruckert et al (US 6,018,651).

Regarding claims 33 and 35, Bruckert teaches a communications transceiver (see fig.1), comprising: a first antenna and a second antenna for selective operation in receiving mode (see fig.1, antennas 114 and 116), an intermediate frequency stage (see fig.1, IF processor 141) for selective connection with the first antenna in a first receiving mode to activate a first signal receiving path (see fig.1, switches 118 and 120), and for selective connection to the second antenna in a second receiving mode (also see fig.1, switches 118 and 120), to activate a second signal receiving path (also see fig.1, switches 118 and 120), wherein the signal receiving path from the first antenna to the intermediate frequency stage when activated in the first receiving mode has a different signal processing characteristic than the signal receiving path from the second antenna to the intermediate frequency stage when activated in the second receiving mode (see column 9, lines 40-58 and see column 10, lines 1 to column 12, line 9).

Regarding claim 34, Bruckert further teaches the first signal receiving path when activated includes an amplifier which provides a different signal processing characteristic than the second signal receiving path when activated, which lacks a corresponding amplifier (see fig.1, amplifier 135).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 36 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruckert et al (US 6,018,651) in view of George (US 3,636,453).

Regarding claims 36 and 38, Bruckert teaches the first signal receiving path comprising an amplifier for the received radio signal (see fig.1, amplifier 135).

Bruckert does not specifically disclose a feedback loop for providing a signal receiving path with different amplifier characteristics than the second signal receiving path.

George teaches a feedback loop for providing a signal receiving path with different amplifier characteristics than the second signal receiving path.

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to provide the teaching of George into the system of

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Bruckert in order to provide an output at a relatively constant power level (see George, column 2, lines 41-43).

Regarding claim 39, Bruckert further teaches a common intermediate frequency stage shared by the first and second signal receiving paths (see fig.1, link 153 and see IF processor 141).

Regarding claim 40, Bruckert further teaches the first and second antennas for supplying a given incoming radio signal to the first and second signal receiving paths, respectively (see fig.1, antennas 114 and 116).

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruckert et al (US 6,018,651) in view of George (US 3,636,453) and further in view of Robinson et al (US 5,138,27).

Regarding claim 37, the combination of Bruckert and George teaches claim 36. The combination of Bruckert and George does not specifically disclose the feedback loop includes a switch for selectively activating the feedback loop.

Robison teaches the feedback loop includes a switch for selectively activating the feedback loop (see the Drawing and see column 2, lines 50-53).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to provide the teaching of Robinson into the system of Bruckert and George in order to provide new and improved signal processing systems (see Robinson, column 1, lines 35-39).

Allowable Subject Matter

6. Claims 18-24 and 31-32 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 18 and 21, Bruckert teaches a communications transceiver (see fig.1), comprising: a first antenna connected to a first input amplifier for amplifying signals received by the first antenna (see fig.1, antenna 114 and amplifier 135),

a second antenna connected to a second input amplifier for amplifying signals received by the second antenna (see fig.1, antenna 116 and amplifier 139),

an intermediate frequency stage connected to the second input amplifier (see fig.1, IF processor 141), and a selector disposed between the first input amplifier and the intermediate frequency stage (see fig.1, switch 118 is between amplifier 135 and IF processor 141).

George teaches the first input amplifier includes a feedback loop for altering the operational characteristics of the first input amplifier in receiving mode (see fig.1).

Bruckert and George, alone or in combination fails to teach a selector disposed between the second antenna and the second input amplifier for selecting operation of the communications transceiver between the first and second antennas.

Regarding claim 31, Bruckert teaches a communication transceiver (see fig.1), comprising: a first antenna and a second antenna for selective operation in receiving mode (see fig.1, antennas 114 and 116), an input amplifier having two respective active operating conditions for amplifying signals received by the first antenna when selected

for operation in respective first active receiving modes (see fig.1, antennas 114), an intermediate frequency stage for selective connection with the first antenna and the input amplifier in the first active receiving modes (see fig.1, IF processor 141), and for selective connection to the second antenna in a second active receiving mode (see fig.1, line 148), a selector system for selecting (see fig.1, switch 118), between the first active receiving modes and the second and the second active receiving mode (see fig.1, switch 118).

Bruckert fails to teach the input amplifier includes a feedback loop which is selectively closed in one of the first active receiving modes, and is selectively open in another of the first active receiving modes, such that the receiving path from the first antenna to the intermediate frequency stage in the respective first active receiving modes selectively has two respective different signal processing characteristics for a given incoming radio signal at the first antenna, the input amplifier in addition to having two active operating conditions providing two different signal processing characteristics of the receiving path from the first antenna to the intermediate frequency stage, having a deactivated condition when the selector system selects the second active receiving mode.

Dependent claims 19, 20, 22-24 and 32 are allowable for the same reason.

Response to Arguments

7. Applicant's arguments with respect to claims 33-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Watanabe (US 5,995,811) teaches radio location-rack test method and system which are reliable even in the presence of outside interference.
- b. Mitzoguchi (US 6,360,077) teaches mobile radio communication device provided with functions for detecting and performing interference.
- c. Strawczynski (US 5,345,597) teaches call setup in a radio communication system with dynamic channel location.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

11/2/04
02/19/04


CHARLES APPIAH
PRIMARY EXAMINER